

## Current Problems of Improving the Environmental Certification and Output Compliance Verification in the Context of Environmental Management in Kazakhstan

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### ABSTRACT

The article discusses the issues of improving the activity of subjects of environmental management in accordance with international environmental standards and national environmental legislation. The article deals with the problem of ensuring the implementation of international environmental standards, the introduction of eco-management, and the practice of eco-labeling and corporate waste management. Existing problems in the area of corporate environmental management are reviewed and recommendations on improving the institutions are put forward. A special attention is paid to the involvement of community and community-based organizations in the environmental management affairs. In order to achieve this goal, abstract-logical, economic and statistical methods are used in the article, the experience of the scientists on the problems of the economy and the environment, their relations and interactions is summarized. The main problem that stands on the way of achieving an effective environmental management is the desire of company's management teams to improve their financial performance by neglecting environmental issues. In order to improve the environmental standards, it is necessary to stimulate population masses to study environment problems.

### KEYWORDS

eco-management, environmental standards,  
environmental protection, environmental policy of  
Kazakhstan, genetically modified foods

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## Introduction

A question of what is more important – the environment or the economy has been raised at the level of international acts at various times (Lo, Yeung and Cheng, 2012; Zhuldizay and Gulbaram, 2016). Since the subsequent development of the industry is already harmless for the environment, the industry requires an involvement and development of the largest possible number of natural resources, without any state recovery strategies of depleted natural resources.

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In Rio de Janeiro in 1992, under adopted Agenda 21, following was confirmed, "eco-management should be attributed to keynotes of sustainable development and at the same time to the highest priorities of industrial activity and entrepreneurship" (Earth Summit'92).

Thus, what does eco-management represent for modern enterprises (companies)? How to improve eco-management in the conditions of intensive use of the natural environment, especially in states where new environmentally friendly technologies ensuring the resumption of the natural environment are absent or infrastructure of innovative technologies is poorly developed.

Traditionally, the eco-management means active and productive activities of economic entities aimed at achieving their own environmental goals, projects and programs developed on the basis of eco-efficiency and equity (Marshall, 2012; Pondeville, Swaen and De Rongé, 2013; Beaumont, 2014).

At the same time, in accordance with the term 95 of Article 1 of the Environmental Code of the Republic of Kazakhstan, eco-management is an administrative management of environmental protection, which includes organizational structure, planning activities, responsibility, practices, procedures, processes and resources for development, implementation, fulfilment, analysis and maintenance of the enterprise's environmental policy (Environmental Code, 2007).

In addition, the term "eco-management" in Russian literature is replaced by "environmental quality management", and in some cases – "environmental management" (Godin, 2013; Korobko, 2012; Mochalova, 2016). In the documents of the international environmental standard ISO 14000, the term "environmental quality management" is used. Is there any difference in the interpretation of these terms? Since their correct understanding fundamentally influences goals and objectives of business entities during the implementation of environmental management.

Eco-management is a necessary activity of state bodies and economic entities, mainly aimed at compliance with requirements of environmental legislation and development and implementation of the relevant goals, projects and programs motivated by the requirements of environmental legislation (Lehmann et al., 2015; O'riordan, 2014; Mitchell, 2013). Whereas environmental management, in turn, is being developed and implemented upon an initiative of natural resource users. It is motivated by the aspirations of the enterprise in achieving environmental protection and increasing energy, ensuring environmental equity, based on the rational use of natural resources, including the introduction of innovative environmental technologies, new alternative energy sources.

In eco-management, where negative results are undesirable, work can be simulated, and results can be fabricated, a precedence is given to the management process. Whereas in environmental management priority is given to the results of environmental management, so even negative results are used to select the possible ways of improving the management.

A company as a whole and every employee (worker) are interested in an effective eco-management, as the effective environmental management of the



enterprise and its positive effects for the environment depends on the training and personal attitude of the enterprise's manager (Janssen, 2012; Haefele, 2013; Welford, 2013).

Finally, the main difference of eco-management from environmental management is following. During the introduction of eco-management, in the event of negative results manager of a company can creatively search new methods and opportunities for enhancement, improvement of results. It involves a flexible approach within manager's powers, as well as a liberty of appreciation in crisis management of negative result and eco-management of an enterprise as a whole.

In environmental management, an executive, or manager of the enterprise cannot afford creative work and enthusiasm in the crisis management of the environmental situation, as negative results in environmental management are likely to result in environmental damage and therefore are regarded as unconscientious attitude of executives and managers during exercising their powers.

### ***Aim of the Study***

To consider problems of effective eco-management introduction in Kazakhstan.

### ***Research questions***

What benefits the business community can get from the introduction of eco-management?

How does the deficiency of environmental management influence on the environment and human health?

### ***Method***

Provisions of regulation theory of sustainable economic development, in the context of a variety of forms economic management and integration processes of agricultural and industrial enterprises' development, works of leading domestic and foreign experts in the field of agricultural and industrial production, as well as the fundamental provisions of environmental science are the theoretical and methodological basis of the research. The validity of the research was achieved by the usage of general scientific methods of analysis.

Conclusions were made as a result of generalization of materials of scientific experience on the problem, usage of abstract-logical, analytical, concrete-historical, economic and statistical methods. In the study systematic approach, dialectical knowledge, economic and statistical, computational and constructive methods were also used.

### ***Data, Analysis, and Results***

According to the Environmental Code of the Republic of Kazakhstan, an introduction of harmonized environmental standards of environmental protection is an obligation for natural resource user; it is also supported by actual enforcement mechanisms for its fulfillment. The introduction of international

environmental quality standards is a voluntary act of a nature resource user, but it also should be expanded and toughen for some subjects of environmental management, activities of which are dangerous or have negative impact on the environment.

Thus, in the Message of the President N. A. Nazarbayev to people of Kazakhstan "Kazakhstan 2030" and in "Strategic Development Plan of the State Standard of the Republic of Kazakhstan", an overriding priority in the field of quality assurance of environmental protection reads as follows. "Considering trends in greening of society as a whole, demographic problems of depopulation and maintaining the quality of life, a new approach to solving the problem of the environmental protection should be accomplished on the basis of the implementation of international standards ISO 14000 and principles of Kazakhstan's sustainable development, using economic instruments: a provision on the eco-labeling of products meeting the requirements of ecologically friendly should be developed" ("Kazakhstan 2030").

Priorities set by the Head of State are justified, because according to the Declaration of the United Nations Conference on Environment and Sustainable Development (UNCED-92), the ecological keynote has become an integral part of the development process (UNCED-92).

The current environmental situation and the quality of consumable and producible products is rather jittery. Respectively, there is an urgent need for adequate measures in order to improve an environmental compliance of both the quality of the human's environment with its biodiversity and ecological safety of consumable water, food, agricultural products.

Accordingly, at this critical stage one of the most effective measure could be the use of certification procedure and the introduction of modern civilized and flexible environmental quality standards.

It should be noted that this approach has deepened the philosophy of production, intensifying not only the statistics, but also the desire to achieve a high quality of production, i.e. an availability of conformity certificates and implementation of any new quality standards, which guarantee the quality and ecological properties of goods and services, do not satisfy neither state nor public. A person and environment need guarantees, not undergoing certification. However, problematical character of other trend that takes place during the production of natural resources in Kazakhstan should be noted.

Many manufacturers of agricultural and food products such as FoodMaster-Kazakhstan, Raimbek Botlers, Coca-Cola Kazakhstan, Asem-Ai, whose products are focused on a wide range of consumers, put a priority on a guarantee of human safety and health, while guarantees on environmental protection are not taken into account.

We should admit one undeniable ecological fact that becomes a kind of slogan in the deteriorating natural environment. Enterprises have to ensure the safety of both human and environment.

According to paragraph 3 of Article 32 of the Environmental Code of Republic of Kazakhstan, "manufacturers labels their products with a sign of ecologically



clean production on a voluntary basis after conformity assessment" (Environmental Code, 2007).

Along with that, it is not mentioned in the legislation how a supervision over unreasonable eco-labeling would be carried out, and this fact can create a chaotic and uncontrolled use of eco-label by market speculators.

Availability of eco-label confirms that the product satisfies environmental friendliness, also the manufacturing process of products is ecological, as well as the raw materials used and its processing, waste management, storage of products.

Therefore, at the present stage in Kazakhstan the number of manufacturers who want to use eco-labeling as a tool for market promotion of products is directly proportional to the number of manufacturers, who meet certification criteria of products quality and sustainability at the entire production process.

Under the conditions of ecological trouble in the environment, quality of daily life products is of particular importance, special role is given to the quality of water and food.

Food market situation in Kazakhstan is intense, and the consumer is vested the right to choose the appropriate food according to price, volume, quality and trademark. Another question is whether the products meet high quality criteria.

Food markets are full of products, the quality of which is questionable under the action of the Environmental Code of the Republic of Kazakhstan, the laws of the Republic of Kazakhstan, hygiene standards, environmental standards, technical regulations governing complex criteria and requirements for the quality of products. Production of goods, certification acceptance authority, inspection of environmental, health services are open to question.

In the context of lack of proper legal regulation, objectively we can face problems when the vast majority of products will be found in "dangerous", "harmful" and "forged" categories, even when the primary certification has given positive findings.

However, some foods containing GMP, GMO, in the context of deficiency of personnel and technologies, which determine the concentrations of artificial additives based on European standards, should contain a label with the designation "this product contains GMOs (GMP)".

The main problem of ensuring the quality of products in Kazakhstan is the lack of national programs and strategies for the implementation of environmentally friendly products. Presence of such strategies or concepts does not secure success in promoting environmentally friendly products. The concept represents planned intention of the State in conduction of environmental management implementation policy, products quality control. At the same time, it is necessary to improve the national environmental legislation, to develop new sanitary regulations, environmental standards and technical regulations in order to tighten the requirements for equipment, production facilities, raw materials, warehouses, places of storage of raw materials, processing technologies, waste products.

Policy of developing a national program for the adoption of environmentally friendly methods of production and environmentally friendly products with the introduction of respective manufacturers' responsibility and quality control of products throughout their life cycle has become imminent in Kazakhstan.

A system of social relations has developed in the field of environmental control over the quality of products during the years of independence in Kazakhstan. Manufacturers are not responsible for products, in practice. Products, which de jure passed all stages of certification, bear the risks and threat to life and health of citizens rather than the products have not undergone the certification procedure.

It should be noted that the environmental certification is not new, and the idea of environmental certification and standardization is important. Different states, including Kazakhstan, taking into account the traditional and non-traditional ideas about life of people, make arrangements for implementation of environmental certification and standardization in symbiosis with the long-term psychological and moral living principles of society.

The problem is another. Certification and standardization, received the right to life in the nineties, only begins to have a legislative and regulatory support.

However, the full accreditation of certification authorities operating in the territory of Kazakhstan has not been held. Not only the organizations engaged in professional activities for the provision of eco-labeling, but also the professional level of employees and expert staff of these organizations should be subjected to comprehensive testing.

The lack of a comprehensive inspection and accreditation procedures for certification authorities in the country is caused by quite a number of factors, among traditionally we have traditionally inherent problem of weak regulation and the existence of shortages of specialists in the field of environmental accreditations and control.

The issue when the current state policy of technical regulation and eco-labeling creates prerequisites for the development of certification services with effective competition among its members requires special attention. The state, through its competent authorities, understands that the strict regulation of the underdeveloped service sector only harms the formation of full-fledged participants and thus affects the development of certification services market.

At the same time, population as a consumer of environmentally friendly products is obliged to demand the relevant products, respectively. This is the case of environmental friendliness of the complete technological process of manufacturing products. The problem is that the population as a consumer is not an active participant in public control over the quality of products. The work of self-regulatory organizations, unions and associations is unproductive, and existing environmental labeling "ECO", "PRESERVATIVE-FREE", written on many food products are not verified by people.

We consider it makes sense to introduce environmental labeling with pictures or explanatory inscriptions: "Dangerous for the environment", "For recycling", "Dangerous for the marine environment", "Does not contain GMOs", which are



used not only in the EU but also in the Republics of Ukraine and Belarus (Regulation (EC), 2003).

In this regard, we consider that it is necessary to develop a flexible transition period of 5-6 years for all companies "to transit to the compulsive environmental labeling and match those standards of environmentally friendly products".

That, at least, would reflect the number of enterprises and companies, which are not ready to change technologically, thereby determining national priorities and values for all economic actors.

At the same time, companies and enterprises should consider eco-labeling not as a freakish state load on the technical process of enterprise, but as an opportunity to improve the production process and attract consumers by eco-friendly products.

The problem of environmental safety and compliance and ecological purity of food products in Kazakhstan is important and lies deep. In our opinion, this issue cannot be solved only by improvement of environmental legislation. It is connected with moral and psychological attitude of the average citizen to suffer economically for the benefit of the health and the environment in general.

We think, that there are several issues that need attention.

The problem of environmental safety and compliance absence in food products is the result of state policy in the field of technical regulation and certification of produced in Kazakhstan and imported products.

According to paragraph 2 of Article 32 of the Environmental Code of Republic of Kazakhstan, "manufacturers labels their products with a sign of ecologically clean production on a voluntary basis after conformity assessment" (Environmental Code, 2007). At the same time, according to paragraph 2 of Article 31 of the Code, "the sale of products, services, processes, subjected to compulsive conformity assessment, and which have not undergone conformity assessment is prohibited" (Environmental Code, 2007). The procedure for conformity assessment of products with environmental standards and requirements is regulated by the legislation of the Republic of Kazakhstan "On Technical Regulation" ("On Technical Regulation").

Thus, under article 13 of the Law of the Republic of Kazakhstan "On Technical Regulation", compulsive conformity assessment bodies carry out conformity assessment ("On Technical Regulation").

In accordance with paragraph 3 of Article 12 of the Law, conformity assessment bodies should use the test results are accredited laboratories in the process of compulsive conformity assessment ("On Technical Regulation").

At the same time, in the field of technical regulation at the level of sub-legal acts, the list of accredited laboratories, working conditions, control over the quality of conformity assessment and decision-making are not explained.

This gap in the system of secondary legislation gives a reason to believe that the existing procedure of environmental certification by conformity of manufactured products with special laboratories plays in favor of the

manufacturer's products. It raises questions of legal responsibility of conformity assessment and audit experts.

When it comes to organization standards, according to Article 17 of the Law of the Republic of Kazakhstan "On Technical Regulation", requirements to technical regulations are considered met of the manufacturing of products used harmonized standards ("On Technical Regulation").

At the same time, the manufacturing of products can use other standards, provided the requirements and provisions established by technical regulations are met.

In this case, it is expedient to set requirements to the "obligation" for implementing environmental standards at certain companies, whose activity is regarded as hazardous for the environment or human health.

At that, the technical regulations that serve as the basis for organization standards should go through public discussions within the framework of environmental hearings. At the same time, in order to enhance the role of environmental nongovernmental organizations (NGO), it is necessary to implement a mechanism for approving environmental projects with regard to the technical regulations that are developed by authorized governmental agencies and environmental NGOs as part of an independent procedure.

### **Discussion and Conclusion**

According to the "Rules for Suspension or Cancellation of Issued Certificates of Conformity or Registration of Declarations of Conformity", organization standards that are developed and approved by organizations independently shall not be recorded and registered by the authorized agency ("On Technical Regulation").

In this case, in order to reduce and minimize industrial risks of causing harm to the environment, it is expedient to implement a trial registration of internal management standards at companies, whose activity is regarded as hazardous or standards for managing hazardous manufacturing and industrial technologies applied at facilities that could potentially emit substances into the environment.

When it comes to eco-labelling or labelling environmentally friendly products, for modern companies that manufacture goods regardless of features or extrinsic properties, it should imply not only the environmental friendliness of the goods and the environmental friendliness of the entire manufacturing process, but also the confirmation of "green" intentions and an established nature-protection policy of companies.

The implementation of eco-labelling implies bringing the entire technological process, implemented cutting-edge technologies, construction, and other measures into compliance with the environmental laws, regulations, and technical regulations.

In other words, eco-labelling should be not only a simply attractive label, but also an exceptional trademark that imposes additional environmental liabilities, criteria, and requirements on the manufacturer.



At that, the manufacturer should realize that using eco-labelling on products gives him the benefit of drawing the consumer's interest not only through an attractive mark of distinction, but also through the natural properties of products, the absence of any risks, and the opportunity to replenish the nutrients that the organism requires through products that do not contain chemical or biologically modified organisms.

At first glance, the lack of active involvement of consumers in the environmental friendliness of products benefits the manufacturers; however, in the systematic perspective, this creates economic, legal, social, moral, and psychological conditions for the development of opinions that reject any environmental innovations.

It is worth noting that the inactive stance of the public when it comes to the environmental friendliness of manufacturing and products is partly the fault of the government and the public itself.

Unfortunately, Kazakh manufacturers regard the diverse assortment of eco-labelling as a logo that helps to attract consumers and advertise products that, in the best-case scenario, do not meet the declared certification requirements. In the worst-case scenario, such products are dangerous to the life and health of consumers.

The current situation is a result of the governmental policy for the support of small and medium-sized business, the cluster policy, food security assurance, and the establishment of the Customs Union that filled the existing market with products through poor-quality import.

Unfortunately, the lack of product and production quality monitoring and quality-assurance policies of companies are relevant problems facing companies in Kazakhstan in the modern market environment.

### Implications and Recommendations

The quest for economic and financial indexes established by company policies not only ignores environmental and nature-protection requirements, but also looks to intentionally engage in environmentally unfriendly activities with negative consequences for the environment, public health, and the state of natural resources.

The situation is further aggravated by the fact that intentional environmentally unfriendly economic activities are carried out not by shadow companies or medium-sized companies with small or average funds, but by large energy companies, such as Tengizchevroil and Kazakhmys, which were among the first to implement the ISO – 140001 international environmental management standards.

This is indicative of the so-called "environmental extremism" of natural resource users, a new phenomenon in nature, which is unrelated to extremism, but which characterizes the open, aggressive, environmentally unfriendly policy of companies that pose a huge risk to the environment and humankind.

The sluggishness of the government when it comes to getting rid of the past, the development of environmental concepts that are impossible to implement, the

development of complicated and impossible goals, and the ineffective state environmental monitoring have a direct effect on the manageability of the environment and the quality of environmental services, which makes it twice as ineffective and unfit for modern conditions.

The mentality of most people does not give hope for a rise of public pressure on governmental agencies and entrepreneurs that would force them to raise environmental standards in the system of social values. The immature environmental worldview of manufacturers and consumers on the domestic market makes it so environmental safety of manufacturing does not have a decisive effect on the consumer when it comes to choosing products.

### Disclosure statement

No potential conflict of interest was reported by the authors.

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### References

- Earth Summit'92. The United Nations Conference on Environment and Development.
- “Kazakhstan 2030” Message of President N.A. Nazarbayev to the people of Kazakhstan;
- UN Rio Declaration on Environment and Development (UNCED-92);
- Regulation (EC) No. 1830/2003 of the European Parliament and of the Council of 22 September 2003;
- Law of the Republic of Kazakhstan “On Technical Regulation” No. 603-II;
- Lehmann, J., Joseph, S. and et al. (2015). Biochar for environmental management: science, technology and implementation, Routledge.
- O’riordan, T. (2014). Environmental science for environmental management, Routledge.
- Mitchell, B. (2013). Resource & environmental management, Routledge.
- Godin, A.M. (2013). Environmental Management. M.: Publishing and Trade Corporation.
- Korobko, V.I. (2012). Environmental Management. Study Guide. M.: Unity-Dana.
- Mochalova, L.A. (2016). Company Environmental Management.
- Janssen, R. (2012). Multiobjective decision support for environmental management. Springer Science & Business Media; 2.
- Haefele, E.T. (2013). Representative government and environmental management, Routledge.
- Welford, R. (2013). Corporate environmental management 3: Towards sustainable development, Routledge.
- Marshall, G. (2012) Economics for collaborative environmental management: renegotiating the commons, Routledge.



- Pondeville, S., Swaen, V. and De Rongé, Y. (2013). Environmental management control systems: The role of contextual and strategic factors. *Management accounting research*, 24(4):317-332.
- Beaumont, P. (2014). *Drylands: environmental management and development*, Routledge.
- Lo, C.K.Y., Yeung, A.C.L. and Cheng, T.C.E. (2012). The impact of environmental management systems on financial performance in fashion and textiles industries. *International Journal of Production Economics*, 135(2):561-567.)
- Zhuldizay, T. and Gulbaram T. (2016). Technology Development in the Terms of Built Environment Creation. *Philosophical Analysis. IEJME-Mathematics Education*, 11(7):2003-2014
- Environmental Code of the Republic of Kazakhstan dated January 9, 2007;